

2005 Dry Year
Federal Columbia River Power System
Fact Sheet April 2005

U.S. Army Corps of Engineers, Bureau of Reclamation, Bonneville Power Administration

Federal agencies have plans in place for Federal Columbia River Power System dry year operations through the Corps/Reclamation/BPA Updated Proposed Action as confirmed in the NOAA Fisheries 2004 Biological Opinion (BiOp). Information sharing and coordination among Federal agencies, states, tribes, power customers and regional stakeholders is vital to regional response to low water conditions in the Columbia River Basin. The agencies will continue to work with the region through the Regional Forum established by NOAA Fisheries, which includes the Technical Management Team, System Configuration Team and Implementation Team.

System Status - April final water supply forecast

- Above Grand Coulee Dam (upper Columbia River) 83 % of normal for Jan – Jul period
- Lower Granite Dam (lower Snake River) 52 % of normal for Jan–July; 52 % for Apr–Jul
- The Dalles Dam (lower Columbia River) 69% of normal for Jan – Jul period
- Libby, Hungry Horse, Dworshak, Grand Coulee expected to refill June 30 (Libby may be mid-July)

Expected Effects of 2005 Dry Year Conditions

- Reliability: region is generally surplus, so do not foresee a supply problem
- A portion of the region's surplus comes from Independent Power Producers (IPP)-owned resources that are not obligated to serving Pacific Northwest load. Therefore, estimates of regional surplus may understate the potential price volatility, as these resources may go to serve other markets
- Electricity prices will increase; BPA revenues will decrease
- BPA call for energy conservation driven by significant concern about potential rate impacts
- BPA Treasury payment outlook okay for now; will reassess at quarterly financial reviews
- Reservoir elevations expected to be at BiOp levels by end of summer
- Irrigation: not enough water to meet all needs
- Navigation: 3 lower Snake reservoirs at minimum operating pool (MOP) +1' for 14' channel; Lower Monumental at MOP

Fish Operations

- Implement operations on Columbia and Snake rivers per Updated Proposed Action and NOAA Fisheries 2004 BiOp, and the Water Management Plan
 - these anticipate low flow conditions in some years
 - adaptive management of operations to be discussed through Regional Forum
 - Technical Management Team discussions began mid-March
- Based on current forecasts
 - provide maximum juvenile fish transport from lower Snake River "collector" dams: little or no spring spill at those dams (Lower Granite, Little Goose and Lower Monumental)
 - river flows well under BiOp objectives
 - lower Snake River reservoirs at MOP or MOP+1'

- Consistent with the Updated Proposed Action and BiOp, 1 million acre-feet (MAF) of water has already been stored in Canada for flow augmentation. This was done early in the year while flows were available.
- Bonneville Dam Second Powerhouse Corner Collector operation and Updated Proposed Action spill levels in April may require modification due to high total dissolved gas (TDG) and low Columbia River flows (concern for effects on emerging chum fry)
- The Dalles Dam spill for fish passage will be modified due to dam safety issues in regards to wire ropes at spill gates at bays 1–6 (unrelated to low water year)
 - spill gates have been set to fixed openings to get as close as possible to 40 percent spill
 - gate operation being tested and evaluated to determine best settings for spring and summer spill seasons
- Fish operations in normal and dry years addressed in:
 - Action Agencies (Corps, BPA, Reclamation) continued BiOp Implementation Planning
 - NOAA Fisheries Regional Forum Process
 - Northwest Power and Conservation Council Mainstem Rulemaking Process

Fish-related Research

- Spring and summer testing of newly-installed Ice Harbor removable spillway weir, or RSW, moving forward; began April 4
- McNary Dam project survival test 12 hour vs. 24 hour spill, will be conducted late April through early June
- Spring testing of Lower Granite RSW and Behavioral Guidance Structure cancelled
- Spring testing of Little Goose spill cancelled
- Ice Harbor spillway deflector test cancelled (complicated by MOP operation and low Snake River flows)
- Lower Monumental spring spill test re RSW placement being discussed in Regional Forum
- Lower Granite RSW summer test plans: May 15 decision based on water supply and flow forecast

BPA Dry Year Tools

- Actions being taken this year:
 - Call for Voluntary Conservation
 - Canadian Storage – 1 million acre-feet (consistent with Updated Proposed Action/BiOp)
 - BPA & Corps stored an additional 430 thousand acre-feet in Treaty reservoirs
- Additional actions considered, but deemed uneconomical for implementation in 2005:
 - Water Conservation and Irrigation Load Buydowns
 - Distributed Generation – idle distributed generation of west side load following customers that could be sunk against load requiring no transmission service
 - Non-Direct Service Industry (DSI) Load Buydown
 - DSI Load Buydown.